

WHAT IS CLAIMED IS:

1. A cannula hood for a syringe, the cannula hood defining a lumen and openings at each of a proximal and distal end, the cannula hood comprising:

a cylindrical portion adjacent to the proximal end and configured to accommodate a syringe body; and

a tapered portion adjacent to the distal end, the tapered portion comprising a proximal section, a mid section and a distal section, the tapered portion further configured to accommodate a cannula assembly coupled to the syringe body.

2. The cannula hood of claim 1, wherein the diameter of the lumen tapers such that the diameter of the tapered lumen in the proximal section of the tapered portion is greater than or equal to the diameter of a hub portion of the cannula assembly and the diameter of the tapered lumen in the distal section of the tapered portion is less than the diameter of the hub portion.

3. The cannula hood of claim 1, wherein the cannula hood comprises one or more materials selected from the group consisting of plastic, rubber, silicone, latex-free rubber, PVC, polycarbonate and acrylic.

4. The cannula hood of claim 1, wherein both the cylindrical portion and the tapered portion comprise silicone.

5. The cannula hood of claim 1, wherein the cylindrical portion comprises silicone and the tapered portion comprises PVC.

6. The cannula hood of claim 1, wherein the cylindrical portion is retained on the syringe body by friction fit.

7. The cannula hood of claim 1, wherein the proximal end of the cylindrical portion is configured to clip onto a proximal end of a luer lock mechanism of the syringe body.

8. A system for performing ophthalmic surgery, the system comprising:  
a syringe body;  
a cannula assembly coupled to the syringe body; and  
a cannula hood defining a lumen and openings at each of a proximal and distal end, the  
5 cannula hood comprising:  
a cylindrical portion adjacent to the proximal end and configured to accommodate  
the syringe body; and  
a tapered portion adjacent to the distal end, the tapered portion comprising a  
proximal section, a mid section and a distal section, the tapered portion  
10 further configured to accommodate a cannula assembly.
9. The system for performing ophthalmic surgery of claim 8, wherein the syringe body  
defines a single compartment.
10. The system for performing ophthalmic surgery of claim 8, wherein the syringe body  
defines two or more compartments.
- 15 11. The system for performing ophthalmic surgery of claim 8, wherein the diameter of the  
lumen tapers such that the diameter of the tapered lumen in the proximal section of the tapered  
portion is greater than or equal to the diameter of a hub portion of the cannula assembly and the  
diameter of the tapered lumen in the distal section of the tapered portion is less than the diameter  
of the hub portion.
- 20 12. The system for performing ophthalmic surgery of claim 8, wherein the cannula hood  
comprises one or more materials selected from the group consisting of plastic, rubber, silicone,  
latex-free rubber, PVC, polycarbonate and acrylic.

13. The system for performing ophthalmic surgery of claim 8, wherein both the cylindrical portion and the tapered portion comprise silicone.
14. The system for performing ophthalmic surgery of claim 8, wherein the cylindrical portion comprises silicone and the tapered portion comprises PVC.
- 5 15. The system for performing ophthalmic surgery of claim 8, wherein the cylindrical portion is retained on the syringe body by friction fit.
16. The system for performing ophthalmic surgery of claim 8, wherein the proximal end of the cylindrical portion is configured to clip onto a proximal end of a luer lock mechanism of the syringe body.
- 10 17. A method of performing ophthalmic surgery comprising:  
attaching a cannula hood to a syringe apparatus, the syringe apparatus comprising a syringe body and a cannula assembly, the cannula hood defining a lumen and openings at each of a proximal and distal end, the cannula hood comprising:  
a cylindrical portion adjacent to the proximal end and configured to accommodate  
15 the syringe body; and  
a tapered portion adjacent to the distal end, the tapered portion comprising a proximal section, a mid section and a distal section, the tapered portion further configured to accommodate a cannula assembly;  
forming an incision in an eye; and  
20 injecting one or more viscoelastic agents into the eye.
18. The method of performing ophthalmic surgery of claim 17, wherein the syringe body defines one compartment.

19. The method of performing ophthalmic surgery of claim 17, wherein the syringe body defines two or more compartments.
20. The method of performing ophthalmic surgery of claim 17, wherein the diameter of the lumen tapers such that the diameter of the tapered lumen in the proximal section of the tapered portion is greater than or equal to the diameter of a hub portion and the diameter of the tapered lumen in the distal section of the tapered portion is less than the diameter of the hub portion.
21. The method of performing ophthalmic surgery of claim 17, wherein the cannula hood comprises one or more materials selected from the group consisting of plastic, rubber, silicone, latex-free rubber, PVC, polycarbonate and acrylic.
22. The method of performing ophthalmic surgery of claim 17, wherein both the cylindrical portion and the tapered portion comprise silicone.
23. The method of performing ophthalmic surgery of claim 17, wherein the cylindrical portion comprises silicone and the tapered portion comprises PVC.
24. The method of performing ophthalmic surgery of claim 17, wherein the cylindrical portion is retained on the syringe body by friction fit.
25. The method of performing ophthalmic surgery of claim 17, wherein the proximal end of the cylindrical portion is configured to clip onto a proximal end of a luer lock mechanism of the syringe body.
26. The method of performing ophthalmic surgery of claim 17, wherein the syringe body is pre-filled with the one or more viscoelastic agents.
27. A method of preventing disconnection of a cannula assembly from a syringe body during ophthalmic surgery comprising:

attaching a cannula hood to a syringe apparatus, the syringe apparatus comprising a syringe body and a cannula assembly, the cannula hood defining a lumen and openings at each of a proximal and distal end, the cannula hood comprising:  
a cylindrical portion adjacent to the proximal end and configured to accommodate  
5 the syringe body; and

a tapered portion adjacent to the distal end, the tapered portion comprising a proximal section, a mid section and a distal section, the tapered portion configured to accommodate a cannula assembly.

28. The method of preventing disconnection of a cannula assembly from a syringe body of  
10 claim 27, wherein the syringe body defines a single compartment.

29. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the syringe body defines two or more compartments.

30. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the diameter of the lumen tapers such that the diameter of the tapered lumen in  
15 the proximal section of the tapered portion is greater than or equal to the diameter of a hub portion of the cannula assembly and the diameter of the lumen in the distal section of the tapered portion is less than the diameter of the hub portion.

31. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the cannula hood comprises one or more materials selected from the group  
20 consisting of plastic, rubber, silicone, latex-free rubber, PVC, polycarbonate and acrylic.

32. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein both the cylindrical portion and the tapered portion comprise silicone.

33. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the cylindrical portion comprises silicone and the tapered portion comprises PVC.

34. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the cylindrical portion is retained on the syringe body by friction fit.

35. The method of preventing disconnection of a cannula assembly from a syringe body of claim 27, wherein the proximal end of the cylindrical portion is configured to clip onto a proximal end of a luer lock mechanism of the syringe body.